**DOE Office of Technology Transitions** 

Innovation cultures and organization performance are shown to be positively correlated with claims that innovative companies have up to 10x higher returns on innovation investments. The ETHOS project hypothesized that culture similarly impacts performance in Department of Energy labs. 2,136 survey responses were analyzed to quantify the culture of six DOE National Laboratories by measuring innovation culture and assessing the impact of "innovation drivers" against key performance metrics. Quantified cultures were correlated against normalized metrics.

### **Conclusions:**

- The innovation cultures at DOE labs differ greatly and can be significantly improved based on tech-based company benchmarks.
- Lab performance, in nearly all areas measured, correlate strongly with the health of a lab's innovation culture.
- There are common addressable innovation culture challenges in the labs, that if addressed, could provide DOE and the public a significantly greater return on investment.

## **Innovation Culture Score Results**

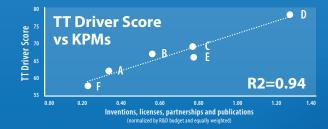


CORRELATIONS

Improving culture score by:

can increase inventions, licenses, partnerships and publications by:





**Analysis of:** 1,226 comments



High scoring labs show leadership frequently promotes:

- --- Support for innovation ---
- --- Collaboration and learning ---
  - --- Working with industry ---

# Top factors that impact key metrics based on correlation data...

### **Inventions**

- Leadership encouragement
- IP recognition skills
- Effective TT processes

#### **Publications**

- Encourage pushing boundaries and taking risks in research
- Encourage employees to be innovative

# **Commercial Outcomes**

- Innovation skills
- Value propositions
- Knowing market needs
- Understanding how innovation contributes to mission

# **Partnerships**

- · Lab encouragement
- Knowing market needs



In the report...



### Interviews from lab

thought leaders

Manager/researcher

Comparisons by:

Innovativeness

Gender

Tenure



- Improving culture outcomes
- Talent acquisition
- Alignment and empowerment
- Value creation ... and more!

